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Convention Preview Finding
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• 8-125A NEMA 3 non-fusible disconnect switches

• Prepped power/control conduits



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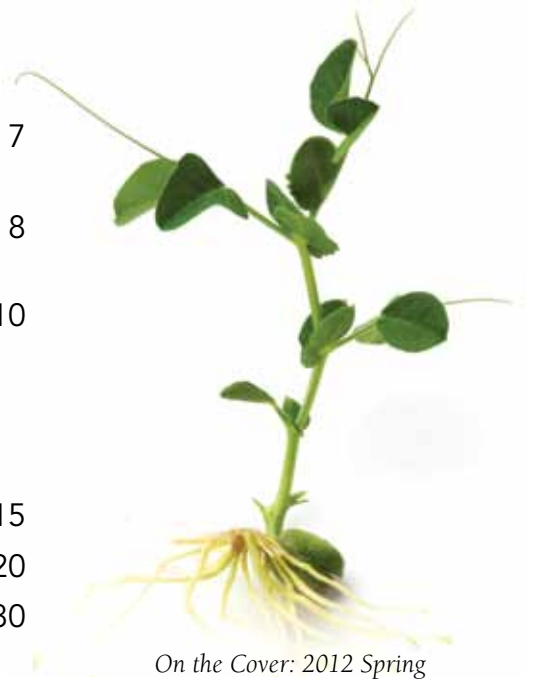
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EVENTS CALENDAR

Industry Trade Shows

POWER-GEN ASIA 2012

October 3-5, 2012; Bangkok, Thailand

The region's premier conference and exhibition for the power generation, renewable energy and transmission and distribution industries. To exhibit, contact Bridgett Morgan at bridgett@pen-nwell.com.

POWER-GEN International 2012

December 11-13, 2012; Orlando, FL

The world's largest show for power generation, featuring the EGSA On-Site Power Pavilion. For exhibit information, contact EGSA at (561) 750-5575, ext 205 or e-mail Jalane Kellough at J.Kellough@EGSA.org.

Conferences

NFMT Conference & Expo

March 13-15, 2012; Baltimore, MD

The country's #1 conference and exposition for non-residential building owners; facility managers; maintenance engineers; directors of sustainability; planning; operations and management. EGSA has partnered with NFMT to launch the Power Source Pavilion. The Power Source Pavilion and educational sessions will provide facility professionals with exclusive access to on-site power solutions. For exhibit information, contact EGSA at (561) 750-5575, ext 203 or e-mail Kim Giles at K.Giles@EGSA.org.

EGSA 2012 Spring Convention

March 25-27, 2012; Austin, TX

The Annual Spring Convention features educational sessions on issues impacting today's On-Site Power industry. More information is available at www.EGSA.org/spring or by calling (561) 750-5575.

EGSA 2012 Fall Technical & Marketing Conference

September 9-11, 2012; Milwaukee, WI

The Fall Technical and Marketing Conference is held during September and is designed to focus on technical and marketing issues. Registration information will be available online in July 2012 at www.EGSA.org or by calling (561) 750-5575.

EGSA 2012 On-Site Power Generation Schools

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Basic Schools

Dallas, TX	February 21-23
Rochester, NY	June 12-14*
Scottsdale, AZ	October 16-18

Advanced Schools

Atlanta, GA	April 23-26
Chicago, IL	August 6-9
Orlando, FL	December 10-13*

*To be held concurrently with POWER-GEN International 2012



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*Michael Pope
2012 EGSA President
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2012 EGSA President, Michael Pope

As we enter the first quarter of 2012, EGSA staff had a unique opportunity to sit down with Michael Pope, the 2012 EGSA President, who took office at the beginning of the calendar year. In lieu of the traditional "From the Top" article, we thought it might be fun to interview Michael and provide this introduction to our Powerline readers.

Michael has enjoyed a rich history with the Electrical Generating Systems Association, having been a member since 1990. He is originally from England and has since lived in places such as New York, Ohio, Toronto and Atlanta. However, Michael and his wife, Pauline, have resided in South Dartmouth, Massachusetts for the last 25 years. He is the Senior Sales Engineer and Marketing Manager for Süd-Chemie Inc., a German company with a catalyst manufacturing facility, in Needham, MA. He has previously held positions with Volvo Penta, R.A. Mitchell Co. (a New Bedford, MA engine and genset distributor) and Lister-Petters.

Interviewer: "Given that an EGSA Presidential term lasts only 365 days, what is the legacy that you would like to leave?"

POPE: "EGSA has been really fortunate in the Board leadership for the past several years. My hope is to continue that forward movement and progress on behalf of the Association and our members."

In the short term, some of the more important areas that require an aggressive plan are EGSA Membership and the EGSA Technician Certification Program.

On the subject of membership, we have a number of initiatives in place to reward members who bring in new members.

There is huge

potential for growth with firms that are in the on-site power generation business, but are not aware of the benefits of EGSA and how the Association supports their personal and professional endeavors.

There is also great recruitment potential amongst distributors, dealers and suppliers to the engine and genset manufacturers. We are strongly encouraging our members to enroll their vendors (and even competitors) to join EGSA. The current membership drive offers great incentives to the member who sponsors the most new members. If I am not mistaken, there is more than \$1,000 in prizes on the table until our Spring Convention!"

INTERVIEWER: "You are right, Michael. There is a "winner takes all" package of prizes for the person who brings in the most new members. Incentives range from a complimentary registration for the Fall Technical & Marketing Conference, a hotel stay, EGSA bucks for each new member... even a free social event (such as golf or fishing)!"

POPE: "Another oar we have in the water is a very active Membership Committee. This Committee, under the new leadership of Greg Linton (JRS Custom Fabrication, Inc. - Ocala, FL), will continue to put members in motion to help actively extend the reach of the Association. New members bring new experiences and additional expertise, as well as new products and ideas. Alternatively, new members gain new ideas, stay abreast of the Industry and become a part of the "Voice of the On-Site Power Industry."

Similarly, the Technician Certification Committee, under the current leadership of Rob Sweeney (R.L. Kistler, Inc. - Rochester, NY) and under the skillful guidance of George Rowley, EGSA Education Director, has worked extremely hard in bringing this industry standard to market during the last few years. We are now poised to add a new facet to the program, with a formalized marketing component that will promote the program to the end-user. There are over 500 EGSA Certified Generator Technicians in North America and we expect that number to double within 18-24 months.

Continued on page 12

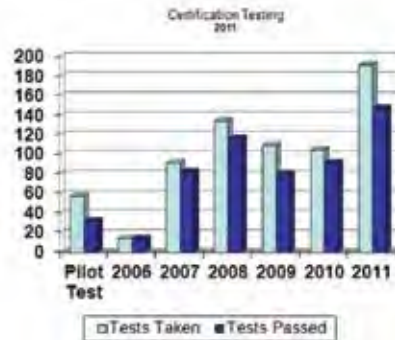
Michael sat down for a formal interview while at EGSA headquarters earlier this month.



George Rowley
EGSA Director
of Education
G.Rowley@EGSA.org

Certification Program Update

Who would have guessed that 2011 would turn out to be the best year on record for the EGSA Certified Technician Program since its inception in 2006? It just goes to show you that it is never over until it is over! It is a great honor to report these numbers for the 2011 calendar year and a source of expectation in looking ahead to 2012.



Testing Status

191 technicians took the exam through December 2011 and 147 of those techs passed it in 2011. We blazed past the previous best year (2008) in which 134 took the exam and 116 passed it. To-date, 700 technicians have taken the exam since program launch and of those who took the test, 563 passed it. You will probably notice that there is a variance in the number of technicians who are currently certified and those who have passed the exam. The difference is that we currently have 515 certified techs because some techs' certification has expired and they have not yet renewed.

One of the initiatives that made 2011 such a good year was Generac Power Systems' decision to require that their Industrial level technicians take and pass the exam to earn and maintain their status as a factory-certified technician. We are very pleased that Generac recognizes the importance of technician certification and appreciate their support of the EGSA technician certification program. The EGSA Certified Technician program was integrated into the Generac bi-annual testing program in early October. These numbers are expected to continue climbing as Generac renews industrial certifications in 2012 within their distributor and dealer networks.

Where Are They?

We periodically report the geographic locations of EGSA Certified Techs and here is the latest update to kick off 2012. With a current total of 55 certified techs, California has maintained the lead with the most certified technicians since establishing the record last May. Due to 10 passing exams in December from Ohio, the Buckeye State has moved into second place with 49 certified techs. Georgia maintains its 3rd place position with 43 certified techs. ■

Certified Technician Demographics

As of December 31, 2011 the number of EGSA Certified Technicians was distributed as follows:

55	CA
49	OH
43	GA
31	VA
26	FL,
24	CT, MI, TX
20	Ontario, Canada
19	IL
18	PA, WI
17	AZ, NC
15	NJ
13	MA
12	NY
11	MO
10	MD
9	WA
8	Trinidad & Tobago
7	SC
6	TN
5	IN, LA, WV
4	MN, NH, OK, UT
3	AL, AK, AR
2	CO, DE, HI, NV; British Columbia & Quebec, Canada;
1	KS, KY, MS; France; Guam; Puerto Rico
0	DC, ID, IA, ME, MT, NE, NM, ND, OR, RI, SD, VT, WY



If you have questions or comments about EGSA's education programs please contact George Rowley at g.rowley@egsa.org or by phone at 561-237-5557.

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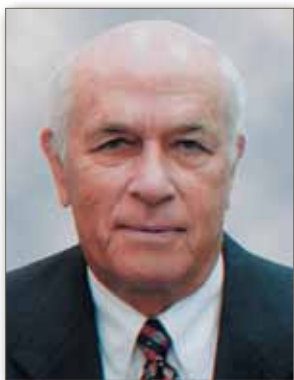
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Codes & Standards

It is interesting to note that several important things occurred during the final quarter of 2011. One important example took place December 7th and 8th at the UL headquarters in Chicago during the meeting of the Standards Technical Panel (STP) for UL 2200 *Standard for Stationary Engine Generator Assemblies*.

Most of the larger manufacturers like Caterpillar, Cummins, Briggs and Stratton, Generac, Leroy Sommer and MTU were represented, however, more than half of the attendees were non-voting members of the STP. One AHJ from New York, Mike Lawson, and One General Interest category member, James Nasby, attended.

The problem is that UL seeks to create a balanced membership on the STP with more than 33% (7) of the members categorized as Producers. This translates to the maximum percentage for any category. UL 2200 STP needs more members from the Government and Consumers and Commercial/Industrial Users categories, which have no members at this point. As a point of reference, I am one of 5 members in the General Interest category. The minutes of the meeting will be available in 30 days. There were 4 Proposal requests and approximately 20 other items were discussed.

One Proposal was made by Paul Mehitreitter, of MTU, concerning Article 60.1 to delete the words “or rated temperature rise from subsection (h).” The panel decided to put subsections (F) and (h) in a new Section 60.3, eliminate subsection (g) and remove the words from (h) as suggested.

One of the discussion items concerned Table 5.2 on thickness of metal. Apparently, the dimensions given do not meet gauge sizes commonly used in this country. No one seemed to know where those dimensions originated. The panel agreed that gauge sizes for the sheet steel should be used and the originator, Greg Marchand (of Briggs and Stratton) will make the proposal.

One item of particular note for EGSA to follow

closely was a discussion item proposed by UL titled “*Future Outline of Investigation for Controls for Stationary Engine Driven Assemblies, Subject 6200*”. This may be an attempt by UL to get around the rejection of all Engine Controls meeting UL 508 mentioned below. There was also a long discussion concerning the fact that UL 2200 does not address Standby Generator Sets or the Standby Rating, but is limited to Prime ratings. What this means is that UL 2200 Listed Generator Sets put into Standby Installations are oversized and therefore more expensive than they need to be.

Several other topics have been brought up concerning UL 2200 this past year. These have been balloted and the two which some of our members were opposed to did not pass and were withdrawn. These topics included:

The proposed addition of Section 31A, Engine Generator Controls, to specify that engine generator controls shall comply with the Standard for Industrial Control Equipment, UL 508. Some members of EGSA felt this was unnecessary and the need was not justified and so did the member of the STP.

The second was similar and proposed the addition of Section 31B, Engine Controls, to specify that engine controls, including engine control modules, shall comply with requirements in the Standard for Industrial Control Equipment, UL 508. Also the UL proposal to revise LP Gas Lines and Fitting Requirements with the addition of a vibration and Aero-static leak test did not pass.

Several proposed additions were passed and have now been published. These include:

- The addition of Section 31C for Heaters must now meet UL 499, Standard for Electrical Heating Appliances;

Continued on page 22

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FROM THE TOP

Continued from page 7



Michael (white shirt) and partner bending oars during a race at the Textile River Regatta in the Boston area. Sculling is a form of rowing where each rower is responsible for two oars, one held in the fingers of each hand. Sculling contrasts with the standard “sweep” rowing, where the rower uses both hands to work a single, larger oar. The sculler is a two-cycle Prime Mover – one intake/exhaust stroke, one power stroke!

Along that same line of thought, I do hope distributors and dealers are fully aware that the cost of EGSA Technician Certification is only \$130 for members. Frankly, if a distributor has top technicians on their staff, I can't think of any reason why they wouldn't encourage certification by EGSA. Becoming certified doesn't require a large investment of time away from their jobs or travel expenses. All they need is the Study Guide from EGSA. In most cases, a technician can sit for the exam within a 100 mile radius of their place of business. And once the distributor has an EGSA Certified Technician in their service department they have a competitive advantage over others that do not."

INTERVIEWER: "During the course of your 22-year membership with EGSA, what has prepared you along the way for this leadership position?"

POPE: "So glad you asked! I have been fortunate in that I became very interested in the Education programs after attending 3-4 conferences. I began serving as the Chair of the Education Committee in 2004, just a few years after George Rowley came

educational format and introducing both Basic and Advanced education tracks. When the Green Committee was formed in 2009, I was asked to be the Chairman. I guess this is the usual way of progressing through EGSA, although that was not my intention at the time. It was simply interesting and enjoyable to be working with some very talented people.

Speaking of the schools, I really enjoy teaching at the Basic and Advanced On-site Power Schools. Educating about Prime Movers and Engine Emissions has not only provided great satisfaction, but I have actually learned a lot as well. You'd be surprised at how a student's questions will impact your own learning!

Upon joining the Board of Directors, I sat initially for 3 years and was then elected to the Executive Board. This brings me back to your first interview question where you asked what could be accomplished in 365 days. When you look at the Executive Board commitment level, you are not just signing on for a year, you are actually committing to five years. It has been these major contributive factors that have prepared me for this year and I am looking forward to this exciting role."

2012 EGSA President, Michael Pope, met with EGSA staff in early January to map out strategies for the year. Pictured here (from left to right) are Sherry Montiel, Kim Giles, Michael Pope, Jalane Kellough, Peter Catalfu, Liz Bustamante and Cara Collins. (not pictured Jim McMullen, George Rowley, Herb Whittall and Kelly Wilson)



FROM THE TOP

Interviewer: "What do you like best about EGSA?"

POPE: "Definitely the networking...but as I reflect on my membership, I am pleased to report that EGSA has afforded me several great benefits... life-lasting friendships, superior industry knowledge, and technical knowledge. Some of those EGSA relationships have also translated directly into sales and business partnerships!"

Interviewer: "Michael, you have sponsored many new members since joining EGSA. What do you feel makes your pitch to a prospective member impactful? Can you share some insights?"

POPE: "Well, it's not a pitch! I firmly believe that any company involved in on-site power generation, whether a manufacturer, distributor, supplier or manufacturers' rep, needs to be a member of EGSA. From the networking opportunities at conventions, the Basic and Advanced Education Programs to the On-Site Power Reference Book, the value is definitely there, it's a 'no-brainer'.

I have met some people who question the value of attending EGSA conventions. The programs for our conventions are extremely relevant and useful. The Communications and Conventions Committee came to the Board 3 years ago with a request to increase their budget in order to attract more engaging and authoritative speakers. Members are telling me how impressed they have been with the programs. Just look at the program we have for Austin in March! Everyone walks away with something.

Interviewer: "Tell us a little about your hobbies and interests outside of the Power Generation Industry."

POPE: "Well, apart from my work with Süd-Chemie in the environmental side of the on-site power generation industry (and I really enjoy this work), I have a number of great interests. I thoroughly enjoy rowing/sculling, both recreational and competi-

tive. I am very fortunate to live close to some great coastline along southern Massachusetts, a great area for sculling. It can be hard work, but, as anyone that has spent time on the water knows, it also has its therapeutic effects! I am also a "gear-head" – with an ancient sports car that I need to start restoring! Pauline and I celebrated our 40th anniversary last year and we are blessed with two children and three grandchildren. So, to quote the New Orleans slogan "Laissez les bons temps rouler!" (Let the good times roll.)

Interviewer: "I'd like to pose a bonus question if you'd humor me...Can you tell our readers just one more thing? If you could speak personally to each of our readers that are members of the end-user community, whether they are a consulting & specifying engineer, a facility manager or a building owner, what would you tell them about EGSA?"

POPE: EGSA is the group that built your on-site electrical generating system. Our members made the engine, the generator - and every electrical and mechanical accessory component from the switchgear to the rain cap. Our members design, manufacture, distribute, install and service generator sets. We are professionals that are constantly learning and striving to be the best at what we do.

If your business has any involvement with on-site power, whether it is emergency standby, prime power, CHP/co (or tri)-generation or demand response, please come and meet us! I know that we can learn from each other. Please join us at our Spring Convention in Austin, TX and/or our Fall Technical and Marketing Conference in Milwaukee, WI. There will be tabletop displays at the Exhibitor's Showcase, some great topical presentations and the chance to meet a highly enthusiastic group of generator set experts. Check out www.egsa.org for details. We look forward to welcoming you! ■

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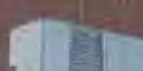


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The Power in Your Hands: The Right Load Bank Strategy Impacts Uptime

By Clayton Taylor, President, ComRent® International

Whether you're responsible for the electrical equipment, HVAC and generators/chillers for a power plant, data center, hospital or cruise ship, the call to action is clear: Make sure you have the power capacities and capabilities necessary to keep your infrastructure up and running – or risk costly outages. That's where a comprehensive load bank strategy comes into the picture. Early and ongoing load bank testing of your high-performance infrastructure system ensures that it works properly from the first installation and continues to function at maximum efficiency.

Why Load Banks?

To effectively create electricity, you need two devices: the generator and the load. Neither works without the other. Technically, a load bank is a device that develops an electric load. It then applies that load to an electrical power source and converts the power output of the source. To understand better, it might be useful to think of a simple analogy of a magnet stuck to a refrigerator. In this case, the magnet is the generator and the refrigerator door is the load. While the magnet creates the power, it won't mean anything unless it has a place on which it can adhere. A generator and load work in much the same way.

A load bank is used to commission the electromechanical systems of high-performance buildings such as data centers and hospitals as well as utility substations and even wind farms. Its primary function is to accurately mimic the operational or "real" load that a power source will be connected to in actual application. However, unlike "real" load, which is likely to be dispersed, unpredictable and random in value, a load bank provides a contained, organized and fully controlled load. This allows commissioning engineers to safely and accurately test and measure the functionality of the electromechanical systems under a variety of load conditions.

Why mimic the power instead of using the direct source? Later, we'll discuss the problems associated with potential failures. Load banks are designed specifically to prevent that. The true load is served by the source and uses the produced energy for something productive. However, the load bank is the reserve: Using energy produced to test, support or protect the power source.

So what do we need to know? To ensure the power generator is functioning properly, it's necessary to find a load from somewhere. Your options are using the utility grid, a plant load, or load banks. However, when there is an absence of load or if there's not enough load to permit the generator from functioning properly at peak capacity – a load bank should be used.

The term "peak capacity" is important. If the generator doesn't fully meet capacity, it does not operate at optimal performance. Generally, a rating that measures peak capacity is used to determine optimal performance. For example, a 100kW generator

can power a load from 1kW to a maximum of 100kW. But if you're trying to reach 125kW, you don't have enough generators to supply the load. For example, in a car with an engine designed to go 150 MPH, if you were to attempt to go 175 MPH, there just won't be enough power to get it done. To reach that peak operation, you'd need an entirely new engine (generator). Load banks are necessary to measure the performance, ensuring you've got the power to reach that optimal "speed."

At What Cost?

Are power outages as bad as all that? Just how much time and money are we talking about when we're speaking of outages? According to an article in eWeek:

"Data center managers and CTOs already know that system downtime can be very expensive for an enterprise, but it's possible they might not know the real extent of the expense when servers, networking and storage suffer a major outage."

A May 2011 study at the Uptime Institute Symposium estimated that companies can realistically lose an average of \$5,000 per minute in the event of an outage. Now get out your calculators. That's \$300,000 per hour! With an average outage of 90 minutes, that means the cost per downtime issue would be a whopping \$505,000.

In September 2011, a major power outage impacted a large region of Washington, halting operation of the state's data center for the first time in 20 years. According the report: "The State of Washington is estimated to have lost \$500,000 as a result of a power surge in August that shut off power to a state government building that housed the state's data center."



Before racks are mounted with mission-critical equipment, this newly-built data center's electromechanical systems must be commissioned using load banks. Commissioning with load banks throughout the life cycle of the data center keeps performance issues at a minimum, lowering the risk for power outages.

But the damage goes even further. For certain processes, power can simply not be interrupted. That can mean a pharmaceutical plant where interruption in the manufacture of the product due to power failure can cause the entire batch to be scrapped. Take the example of military applications. Obviously, to keep us safe, real-time information for the military is crucial. Even the remote possibility of failure is unacceptable and potentially dangerous to our critical defenses. One final example is a hospital.

Losing power for prolonged periods at a hospital can cause monitors and treatments to fail, risking lives of patients across

the hospital. One such example occurred in Australia in 2009, when more than 100 hospitals experienced a 36 hour power failure due to a faulty circuit breaker. The inability to retrieve patient records and vital test results nearly crippled NSW Health. A report in the Sydney Morning Herald claims:

“Some records were lost, x-ray and pathology results could not be accessed and staff were forced to use whiteboards to keep track of emergency patients after the main server shut down at 9 am. Thousands of patients were affected, with doctors and nurses forced to take notes on paper and go to other parts of the hospital to collect hard copies of results, extending treatment times and adding to the confusion.”

Despite the clear need for an effective load bank strategy, few have dedicated enough time to understand its importance. Even engineers aren't always sure how and when to use a load bank. Commissioning professionals know that load banks are quite indispensable to delivering efficient and reliable onsite power. Typically, load banks are rolled out and powered up only a few times a year at most – and usually only after a power failure has caused an issue. This type of infrequent, reactive use is a contributing factor in the types of outages described above. Because their use is regarded as an afterthought, it can be challenging to find technicians with expertise using them, and the lack of regularly scheduled load bank testing means that degradations in the electromechanical systems caused by years of wear and tear can be missed.

Harnessing the Power: Effective Load Banks

It is important to note there are many options when choosing a load bank. So how do you know which ones to consider? Really, it's all about the situation at hand as there is no “one size fits all” when it comes to load banks. It all depends on what you want to do. Many companies will tell you that low or high voltage load banks can often do the job – no matter what you need to accomplish. But that's not really the case. The load bank system you choose must be directly correlated to the type of electrical system you have. As mentioned before, a load must be directly correlated to the power produced by the generator.

For example, when it comes to commissioning power plants, maritime electrical systems, stand-by generator systems and substations – the answer is a medium voltage load bank. Often companies turn towards low voltage load banks or a utility grid. But there are many reasons this is not the optimal solution.

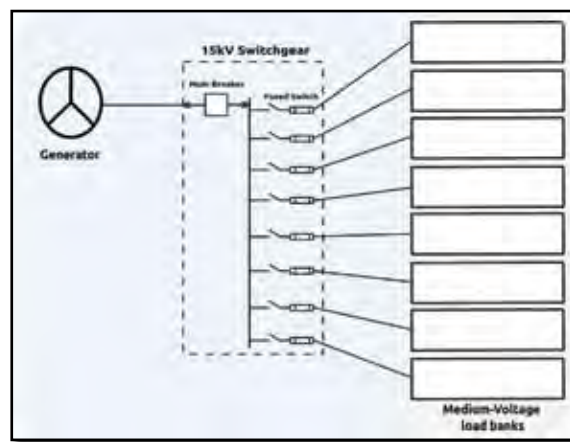
A medium voltage load bank is a resistive or reactive load bank that contains resistors or reactors that operate above 600 VAC and below 69,000 VAC. The most common voltages used are kV (4160V) and 15kV (13,800V). In comparison, a low voltage load bank typically operates at 480 VAC. These systems often come as “pre-wired” containerized systems with all equipment mounted to a single trailer.

But the differences are extreme. First, medium-voltage load banks are simply more accurate. There's less equipment involved and you don't need a transformer to get the job done. This makes it easier to get a direct, more accurate picture of system performance. This high degree of accuracy and fewer components means there are not as many points of failure to monitor. And failure is just not an option.

Take for example the major power outage that darkened much of Houston just after Hurricane Ike in 2008. The Hous-

ton Chronicle reports that lost economic activity and repairs to electricity infrastructure cost the city more than \$6 billion when final tallies were in. A 2005 study by Berkeley Lab took a wider view on the costs of power failure on the entire power grid. The report estimates that electronic power outages and blackouts cost the United States about \$80 billion annually.

Taking this one step further, there are simply things that cannot be accomplished using a low voltage load bank. Recently we consulted on a billion-dollar mining project in Arizona. The customer wanted to commission a new 40 Megawatt low-emission natural gas turbine generator, being deployed to augment local utility power in support of expanded operations. By utilizing medium voltage load banks, project managers could rapidly commission the gas turbine's additional electrical generating capacity – eliminating long lead times and higher costs. In fact, testing on this system lasted only eight days and had limited impact on the site's day-to-day mining operations. This level of speed and dramatic cost-savings would have been nearly impossible with a low voltage system.

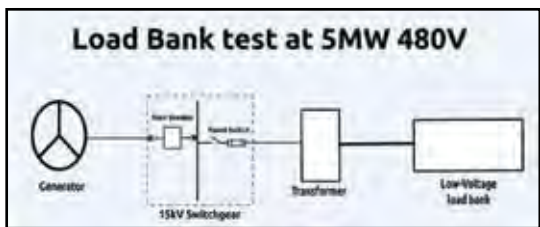


The medium-voltage load banks commissioning a 40 Megawatt high performance turbine engine. Note how the utility grid or plant load is not used, eliminating risk, saving time and placing control of loads back with the commissioning engineers and technicians.

Lower voltage systems can also cause power quality issues. In his paper “Strengths of Using Medium Voltage Load Banks,” Daniel Jocelyn (Managing Partner of Critical Solutions and Innovations LLC) notes:

“When dealing with a lower voltage system, transformers being installed downstream of system components to be tested must now be evaluated for impact on power quality test results. An isolation transformer will introduce an unplanned grounding point and can induce unplanned stress on the systems tested. This is due to a dramatic inrush and magnetic resonance issues.”

Another area of importance is safety. As noted earlier, some rely on the utility grid – rather than medium voltage systems – for testing. This can be problematic and quite dangerous. Quite simply, when you're using medium voltage equipment – as opposed to leveraging the utility grid for testing - you can count on fewer power surges. Power surges occur when the voltage is 110% or more above normal. These surges often introduce safety issues for the entire system. Medium voltage systems are a quick way around surges that can damage equipment.



With a low-voltage load bank, the transformer must be used, increasing risk of failure during the commissioning process.

To reach the level required by medium voltage banks, low voltage load banks often require multiple transformers and multiple banks designed in containers. But quite often, load banks simply are not designed to operate in such close proximity. As "Strengths in Using Medium Voltage Load Banks" explains:

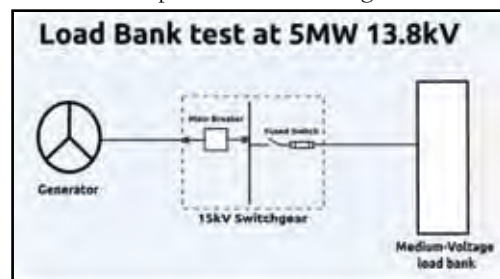
"When multiple transformers and multiple low voltage load banks are assembled in containers, trucks, on trailers or on-site, there are risks created because the proximity of the heat generating devices (load banks) were not designed by the manufacturer to be operated within certain distances from adjacent load banks and the resulting fluid mechanics of air flow may result in cooling failures or fires of the transformers, cables or load banks."

The very nature of low voltage systems poses additional challenges in terms of the volume of equipment. In addition to greater points of failure mentioned above, multiple systems introduced by low voltage infrastructures simply take up more space. We already know that – to compensate for the lower voltage – multiple containers are often used to reach optimal power

needs. This means more space and a larger footprint. This can also drive higher costs.

Another factor to consider is the time it takes to test the equipment. When talking testing, timing is everything. It's necessary to conduct testing in a short amount of time to reduce costs. Due to the larger infrastructure required by low voltage systems, valuable time – and associated costs – are often created due to increased time.

A final point to consider is the planning of conductors. Additional labor, increased costs and risk are introduced when the load bank or transformer assembly is not pre-wired as low voltage conductors are designed and connected. Once again, "Strengths in Using Medium Voltage Load Banks" explains: "Multiple conductors in parallel pose fire or short circuit risk when free air circulation is not achieved by having cable laid out on top of each other and not tri-plexed. The multiple conductors in parallel must be monitored with temperature monitoring devices."



The medium voltage load bank eliminates the need for a transformer during the testing – which means fewer points of failure.

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Where Do We Go from Here?

By now, you should see the benefits of medium voltage systems as opposed to stringing together multiple low voltage load banks – or by using the utility grid.

But not all medium voltage systems are created equal. When choosing your vendor partner, several areas should be strongly considered. First, you should go with a vendor that has products designed specifically to meet your needs. As we've seen, not every infrastructure is the same. A tremendous amount of damage can be done if you use the wrong system.

Additionally, many voltage infrastructures aren't nearly as complex as they were 10 years ago. There are many vendors who have streamlined the infrastructure – requiring less space and eliminating complexity. You should also go with a vendor that can minimize your reliance on the utility grid to test transformers, switches, substations, or any equipment that is critical to power generation. That means dramatically reducing the risk of outages caused by power surges and failed load tests.

Another factor to consider is design. Given the complex requirements associated with utility power plant equipment, you need a product that is custom-engineered to handle load specific to the infrastructure at hand, such as transformers, black start generators, wind turbines, solar arrays, transfer switches, and switchgear. You should go with a vendor with a large enough inventory and variety of load banks to support virtually any test or create any optimal testing environment.

Caption: Rack-mounted load banks in a new data center facility test the hot and cold air aisle containment strategy for servers.



Another area to consider is resistive and reactive test solutions. A resistive load bank follows the behavior of the electrical system closely. It copies the electrical load of the generator. With a reactive load bank, you're creating and monitoring the lagging power factor.

Again, different situations require different types of testing equipment. For this reason, what's required is a vendor that understands the difference between and value of resistive and reactive testing -- ensuring a complete and accurate test of the generator's performance. This guarantees the generator can withstand a lagging or reactive load without risk of failure and downtime to operations. A vendor must also have the ability to conduct parallel testing on medium voltage generators with no transformers necessary for faster commissioning. That's more cost-effective in the long-run.

A partner must be able to save you time in substation commissioning. What's key is a vendor with the expertise, knowledge and equipment to commission substation components for the modern smart grid – safely, quickly and with limited risk. A vendor partner should have solutions with the power to reduce the risk involved in back feed or making changes to the transformer to simulate the actual load.

Finally, any vendor with whom you choose to partner should go beyond providing equipment. Look for a partner with the technical know-how and experience to act as a valued resource. Seek out a vendor with the ability to walk your site and help you specifically plan equipment placement, access, ingress, and egress – plus end-to-end logistic coordination and roll-out and roll-up services. This is critical to ensure a safe, risk-free commissioning experience.

The End Game

By now, it should be clear there are distinct differences between using a low voltage load bank or utility grid – as opposed to a medium voltage system – to test and ensure the reliability of your critical power infrastructures. What's critical is a system that can ensure optimal efficiency of your infrastructure while minimizing costly failures. More often than not, a medium voltage solution is the way to go. From cost savings to reduced danger to minimal downtime – a medium voltage load bank can meet all these requirements. And you need to partner with a vendor that truly understands your needs – and has the medium voltage solutions to tackle your challenges. Be sure you take your time and choose someone that brings all these things to the table. Time to take the next step. The power is in your hands. ■

About the Author

Clayton Taylor is the founder and CEO of ComRent International, LLC, a load bank testing solutions provider in North America. After starting the company in 1997 with just one employee, Clay has led ComRent through continuous year-over-year growth that now includes 18 operating locations with over 100 employees in the U.S., Canada and abroad. Clay is a member of EGSA, NETA, 7X24 Exchange and IEEE. An avid sailor, Clay has restored several classic Chesapeake 20 sailboats and is an active member of the West River Sailing Club. Clay can be reached at ctaylor@comrent.com.



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We encourage you to reserve your room online as it will ensure you book within the EGSA block and provide you added EGSA negotiated benefits such as complimentary high speed internet in your guest room. Another added feature to booking online – you'll be provided with additional upgrade options such as a River View (\$30 additional, per night) or a RESPIRE room, which is hypo-allergenic (\$35 additional, per night).

change, despite a rough economy. He has presented more than 2,400 speeches and seminars in every US state and in more than a dozen countries.

You won't want to miss a lively panel discussion on GenSet Controls, moderated by Ed Murphy (2012 EGSA Secretary-Treasurer). This panel of five EGSA Member firms will take a peek into the future of today's genset controller. This panel discussion will also provide a great opportunity for gen-set

control manufacturers to hear 'the voice of the customer.' Come prepared with any questions you may have!

If you are seeking tips and tricks of a trade, then look no further than our speaker line-up for Tuesday. Patrick O'Malley will provide a presentation on Social Media that will give Convention delegates ideas designed to generate new sales and improve business. Pat is a regular contributor to Fox TV News as a social media and Internet expert. He has also previously held the title of VP of Operations for Northern Light, the search engine firm that was Google's top competitor back in the year 2000. He will present the solutions that can help to get your company's product onto the first page of Google search!



Patrick O'Malley



Mark Sanborn

The Electrical Generating Systems Association (EGSA) is the world's largest organization exclusively dedicated to the On-Site Power Generation Industry. Comprised of more than 800 companies throughout the U.S. and around the world that make, sell, distribute and use On-Site Power generation technology and equipment, EGSA encourages the exchange of ideas and information for the mutual benefit of its Members, the industry and end-users and serves as a source of information, education and training while actively promoting professionalism, communication and international cooperation. The Association is also the leading authority on recommended practices and the monitoring of performance standards for the On-Site Power Industry. For further information, please visit www.egsa.org or call 561/750-5575.

Continued from page 10

- The addition of Section 10A, Alternators and Generators, to specify that the Alternator or Generator shall comply with the requirements of UL 1004-4 – Standard for Electrical Generators;
- Revisions to Sections 2.2, 2.22 and 5.11 to allow live parts operating at less than 15 V dc to be outside the enclosure when provided with insulating means; and
- The addition of paragraphs 6.1.1, 6.1.2 and 6.1.3.14 and revision to paragraphs 2.4.2 and 6.2.1.4 to differentiate requirements for units with access restricted to Service Personnel and those intended to be accessed by the user.

The 2011 Edition of IEEE 1584 Arc-Flash Hazard Calculations Standards Set is now available in one CD-ROM. The Set includes the following:

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Hazard Calculations – Amendment 2: Changes to Clause 4.

The IEEE member price is \$660 and the non-member price is \$825. You can order at standards.ieee.org/store or from IEEE, 445 Hose Lane, Piscataway, N.J. 08854.

Expect new details from me in March/April, as I will be attending the NEC Panel 13 meeting from January 15 to January 21, which will be the first review of the Proposals for changing the 2014 Edition of the National Electric Code. ■

If you have any comments concerning any of these UL standards, please contact Herb Whittall at hwhittall@comcast.net.

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Eddy Weiss

Convention delegates will also enjoy plenty of networking during the course of the Convention, in both formal and casual settings. The Exhibitor Showcase, for example, is a tabletop show that allows for a more traditional, formal dialogue between On-

Site Power Manufacturers,

attending Distributor/Dealers and Manufacturer Representatives. Similarly, EGSA Committee Meetings create opportunities to make important, lasting contacts and empower delegates to participate and have a voice in the decisions that shape the On-Site Power Industry.

The Convention schedule also includes casual social events like the President's Reception and the Golf and Fishing tournaments that give Delegates a chance to relax and take advantage of effective networking time to strengthen relationships within the Industry. EGSA has even added a third social option for the Spring - if fishing and golfing aren't your ideal, perhaps you will join us for a sight-seeing tour of Austin...by Segway! ■

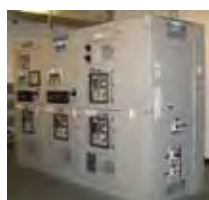
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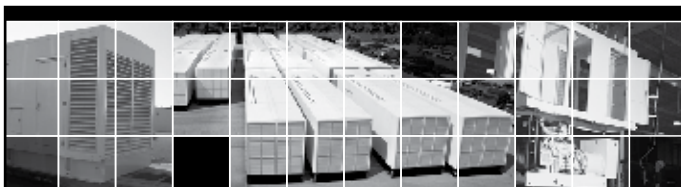
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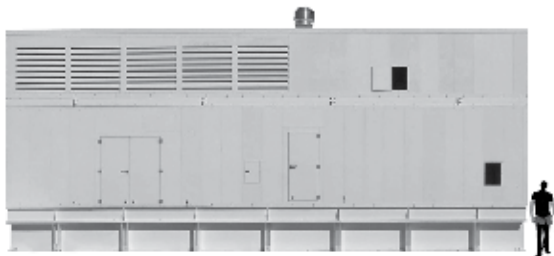
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IEEE 1547 Unintentional Islanding Protection for Landfill Gas Power Generation Facilities

By: Timothy Hedquist, Director of Standards and Development, Caterpillar, Inc.

Distributed generation (DG) facilities need a dependable, cost-effective means of providing protective functions for the connected utility and utility customers to comply with the IEEE 1547, Standard for Interconnecting Distributed Resources with Electrical Power Systems. While this need applies to all DG providers, it is most keenly felt today by landfill gas to energy providers, who use large reciprocating engines to generate electric power. This article addresses the challenging unintentional islanding protection requirements using the techniques defined under US Patent Application 12/967,688.

The majority of distributed generation resources are small, privately-owned electric power generators that are connected to a utility grid at various locations to augment utility generation capacity. Landfill gas power generation facilities are one example of distributed generation resources. CO₂ and methane gases are extracted from a landfill, taken through a process of cleaning, drying and pressurization, and then used as fuel for a reciprocating gas engine. This engine drives an electric power generator, producing electricity that is sold to the local utility through a connection to the power grid. Landfill gas power generation is considered an environmentally-friendly technology, since emissions resulting from the combustion of CO₂ and methane are far less detrimental than the traditional practice of releasing these gases into the atmosphere.

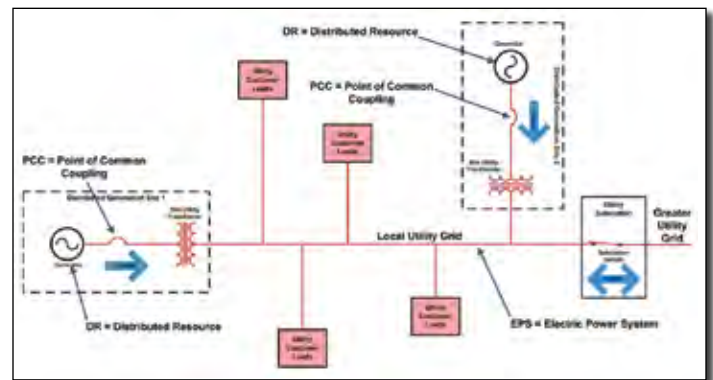
The importance of distributed generation systems is clearly recognized, but as these resources continue to make in-roads into the bulk power system, guidelines are needed to stipulate how they connect to it. To this end, the Institute of Electrical and Electronic Engineers (IEEE) worked with the United States Department of Energy (DOE) to develop the IEEE 1547 Standard, which provides a set of criteria and requirements in the U.S. for the interconnection of distributed generation resources into the utility power grid.

This standard was approved by the IEEE Standards Board in 2003, after which, it received an American National Standards Institute (ANSI) designation. Further updates to the Standard were affirmed in 2005 and 2008. By following the requirements of IEEE 1547, distributed power producers can improve the safety of their installations, minimize equipment risks and reduce service interruptions to utility customers while interconnected to the utility power grid.

The IEEE 1547 standard covers a wide range of requirements for interconnecting distributed resources (DR) with electric power systems (EPS). By and large, compliance with most requirements can be achieved using traditional means without incurring significant additional cost, such as the protective features offered by conventional utility-grade protective relays. However, there is one IEEE 1547 requirement that could add significant cost to an installation: protection against unintentional

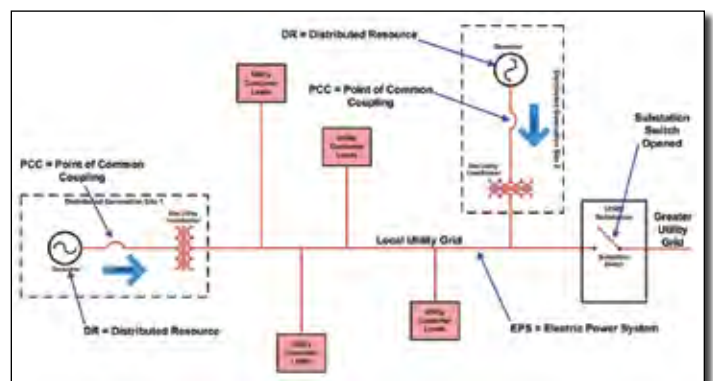
islanding. An unintentional island is formed when distributed generation continues to energize a portion of the utility power grid that the local utility has de-energized. This article provides a cost effective solution for the detection of an islanding condition in a landfill gas power generation facility.

Figure 1 – Normal Distributed Resource Operation



Under normal conditions (as shown in Figure 1), distributed resources such as landfill gas power generation facilities are attached to the local utility grid through their respective points of common coupling (PCC), e.g. generator circuit breakers, and export power to augment utility generation capacity. Depending on the magnitude of utility customer loads, the utility may supply power to the local utility grid, or some of the power generated by the distributed resource may be exported to the greater utility grid through a utility substation.

Figure 2 – Unintentional Island

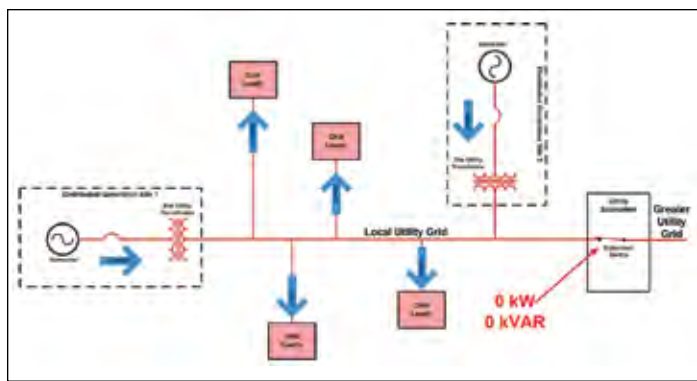


As shown in Figure 2, an unintentional island is formed when the utility substation switch is opened for reasons such as protection or maintenance, and the distributed resource continues to power the local utility grid.

Section 4.4.1 of the IEEE 1547 standard states: "For an unintentional island in which the DR energizes a portion of the Area EPS through the PCC, the DR interconnection system shall detect the island and cease to energize the Area EPS within two seconds of the formation of an island."

Under most conditions, when significant amounts of power are imported or exported through the substation switch, the detection of an unintentional island by the distributed resource is simple. In these instances, the opening of the utility substation switch will impose a step change in distributed resource kilowatt (kW) or kilovar (kVAR) output. In turn, this step change will cause a step change in distributed resource output voltage or frequency. Conventional protective means, such as over/under voltage protection (ANSI Device 27/59) or over/under frequency protection (ANSI Device 81 O/U), will trip the PCC and de-energize the area electric power system (EPS) within 2 seconds to eliminate the unintentional island.

Figure 3 – Total DR Power equals Total Utility Customer Loads



However, there is one unintentional island scenario that is very difficult to detect. This can occur when distributed resource output exactly equals the utility customer loads being served on the local utility grid. For the example shown in Figure 3, the output of the distributed resource exactly equals the power needs of the utility customers on the local utility grid.

Under the scenario depicted in Figure 3, there is no real or reactive power flow through the utility substation switch. If the utility substation switch were opened under this condition, there would be no step change in either kW or kVAR demand on the distributed resource, and the means of conventional protection would see no change in voltage or frequency. An unintentional island would be formed, and the distributed resource would not sense the unintentional island condition.

TRADITIONAL SOLUTIONS

The solutions listed below provide examples of unintentional islanding protective functions, but they do not include all available passive protection means.

Solution #1

Change in Frequency over Change in Time ($\Delta F/\Delta T$) – Early after the publication of IEEE 1547, some protective relay manufacturers attempted to meet the need for unintentional islanding protection by furnishing a $\Delta F/\Delta T$ protective function. This protective function looks for small step changes in frequency over time to detect an unintentional islanding condition.

This passive protective function offers additional protection against unintentional islanding, but it cannot protect against the

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scenario described in Figure 3. Under the Figure 3 scenario, no step change in distributed resource frequency will be realized, and the $\Delta F/\Delta T$ function will not generate a PCC trip.

Solution #2

Direct Transfer Trip (DTT) – Through this traditional means of insuring that an unintentional island is not formed, a signal is sent from the utility substation instructing the distributed resource to trip the PCC/circuit breaker. The installation and maintenance of DTT is expensive for the utility, and this expense is often transferred to the landfill gas power producer. With the high capital expenditures for the landfill gas power producers to incorporate DTT, there are instances when a negative profit picture exists, dissuading the landfill gas power producer from participating.

ACTIVE PROTECTION FOR LANDFILL DISTRIBUTED RESOURCES

Section 8.4.3.1.5 of the IEEE 1547.2 Standard states: “In some cases, reactive scheme protection can be fooled if the generator is able to carry the load of the island without a substantial change in voltage or frequency. Some inverter manufacturers have added an additional ‘active’ non-islanding compatibility.”

To better detect an islanding condition, many utilities require DTT unless an active alternative for unintentional islanding detection/protection is provided. Active islanding detection methods have been successfully applied to inverter-based DGs, but they have not been available for use in engine-driven generator set DGs until now.

In the continental U.S., there are several assumptions that impact the implementation of cost-effective IEEE 1547 unintentional islanding protection:

1. Utility frequency will vary approximately ± 0.03 Hertz under normal operations.
2. A distributed resource is of insufficient power to impact utility frequency.
3. Due to item 2 above, the distributed resource will always be at utility frequency when in parallel with the utility source.
4. Under unintentional islanding conditions, the distributed resource can change the frequency of the EPS.
5. When a distributed resource is in parallel with a stiff utility, any attempt to change engine speed (frequency) will result only in a change in generator load, not frequency.
6. When a distributed resource is islanded, a change in engine speed will result in a change in EPS frequency.

Under these assumptions, imposing a “push-pull” on engine speed bias effectively provides an active means of detecting an unintentional island condition. For normal operating conditions when the distributed resource is in parallel with the utility source, there will be no change in frequency. In an unintentional island condition, the speed bias push-pull will cause a change in distributed resource frequency, which can be captured to drive an unintentional island trip of the distributed resource PCC/circuit breaker.

For landfill gas power generation sites, profitability depends upon consistent engine-generator output power. Therefore, the push-pull of engine speed bias must be gentle enough not to negatively impact power production, but strong enough to move generator frequency outside limits and trip the engine-generator circuit breaker/PCC in an unintentional island condition.

For sites in the continental US, utility frequency variance is about ± 0.03 Hertz. Therefore, an unintentional island trip point of ± 0.05 Hertz (59.95 to 60.05 Hertz) will prevent spurious trips of the distributed resource while capturing any unintentional island condition and tripping the distributed resource circuit breaker.

In addition to this protection, a $\Delta F/\Delta T$ function is included to capture steps or drifts in utility frequency that would indicate an unintentional island or utility conditions outside of normal, expected operating parameters.

Figure 4 – Unintentional Island Trip

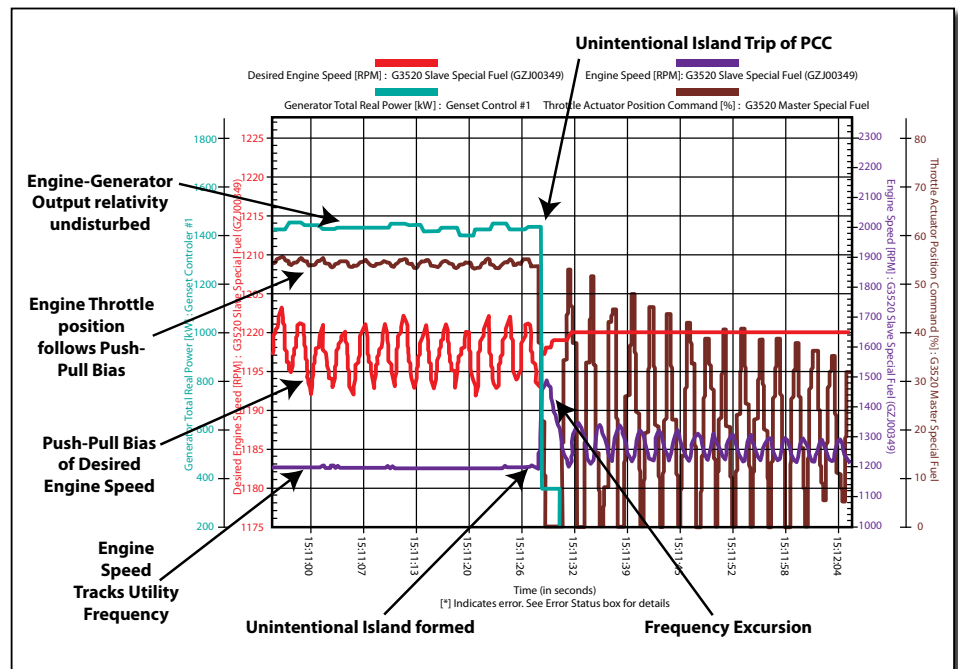


Figure 4 illustrates an actual example of an unintentional island trip recorded on Cat® ET software. The push-pull of desired engine speed causes corresponding changes to the position of the engine throttle. Under normal conditions, this causes little change to generator power output. When an unintentional

Top of Mind

IEEE 1547 Unintentional Islanding Protection For Landfill Gas Power Generation Facilities

island is formed, the desired engine speed push-pull causes an excursion in engine speed and therefore generator frequency. This excursion is captured by the IEEE 1547 unintentional island protective function and a trip signal is sent to the PCC/circuit breaker. Without an active function to bias engine speed, an unintentional islanding condition could not be detected if real or reactive power is not transferred across the utility substation switch. UL compliance requires the successful execution of 15 consecutive tests at various generator set loads and power factors.

IMPLEMENTATION

Due to variances in utility frequency stability and individual engine-generator dynamics, the implementation of IEEE 1547 unintentional islanding protection requires the following steps:

1. Observation of "normal" frequency variations by the local utility over time.
2. Establishment of protective function setpoints to accommodate normal utility frequency variations with enough margin to eliminate spurious PCC trips.
3. Calculation of sufficient push-pull bias for a specific engine-generator to insure PCC trip on an unintentional island condition, and minimization of operational engine-generator output variations.
4. A protection test plan that local utilities can execute to assure the functionality of the IEEE 1547 unintentional islanding protection. ■

About the Author

Tim Hedquist is the Director of Business Development for ISO, LLC, a Caterpillar Electric Power Business. He has been with ISO since 1996, holding positions in Engineering Management and Research & Development. He is the inventor/developer of numerous Caterpillar Switchgear products. Tim holds two patents with others pending.



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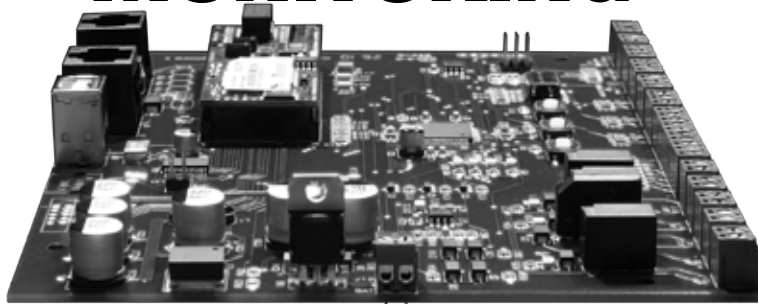


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While ESL is new to EGSA Membership, joining in 2011, they are not new to electrical generating systems. For several years, ESL has participated in Power-Gen International, promoting their emergency power connection equipment and power distribution units. Considered an OEM (Original Equipment Manufacturer), the company specializes in engineering power distribution solutions to meet the demands of their customers, including customized applications that are safe to use, easy to operate and UL Listed for their intended application.

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ESL's primary markets for their emergency power connection equipment are municipal facilities, financial centers, gas stations, grocery stores, and restaurants. While ESL's emergency power product line is sold predominately in the USA and Canada, they also have a strong international presence with several other safety-interlocked electrical product lines. In fact, in 2011 more than 30% of their revenue was from export sales of these

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In the recent economic downturn, ESL turned the recession into an opportunity by expanding their product offerings and successfully promoting their company in many different industries. ESL President, Michael Hellmers states, "We are cautiously optimistic with our domestic economy and the challenges of the global financial crisis. Our goal is to remain lean while we continue to invest in R&D and new markets."

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this will be more self-reliance on power generation and back-up systems. After evaluating the industry trends and ESL's capabilities, Hellmers confidently observes, "Our firm is well poised for the future and as more efficient means to generate on-site power emerges, probably based on green technologies that have yet to be developed, ESL Power Systems will be ready."

For more information on ESL products and services, please visit www.eslpwr.com. ■



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 5. They are a wholly owned subsidiary of a firm that qualifies under rules one through four.
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Contractor/Integrator.....	\$285	\$100	\$285
Manufacturer's Rep.....	\$285	\$100	\$285
Full Associate Member.....	\$285	\$100	\$285
Energy Management Companies.....	\$200	\$200	\$200
Regular Associate Member.....	\$200	\$100	\$200
Retiree Member.....	Complimentary	\$0	\$0
Student Member.....	Complimentary	\$0	\$0

**Initiation
Fee Waived
Through
3/31/2012**

NOTE: A FULL 12-MONTH DUES PAYMENT MUST BE RECEIVED WITH THIS APPLICATION. The Association's Membership Year is January 1 through December 31. Dues payments that extend beyond the first Membership Year will be applied to the second year's dues.

FULL PAYMENT MUST BE RECEIVED WITH APPLICATION.**3. Membership Dues** (Please fill in the appropriate TOTAL amount from the above dues schedule.)

Membership Dues \$ _____

Membership Plaque (optional)** \$ 49.95**

On-Site Power Reference Book (optional)** \$ 125.00**

Florida Residents: Add 6% Sales Tax to ** items \$ _____

Continental US Residents add \$5 shipping/handling to **items. \$ _____

Non Continental US Residents should call EGSA

Headquarters for shipping charges for **items. **TOTAL** \$ _____

4. Payment Method (Payable in US\$ drawn on U.S. bank, U.S. Money Order, or American Express)

☐ Check # _____ Amount Due \$ _____

☐ Money Order

☐ Mastercard ☐ Visa ☐ American Express

Card # _____ Exp. Date _____

Signature: _____

Print Name: _____

5. Products/Services Please describe the nature of your business (50 words or less, NOT ALL CAPS). If you are a Manufacturer's Representative or Distributor/Dealer, please indicate which manufacturers you represent and/or distribute for; if you are a student, please provide the name and location of your school, your major and your anticipated graduation date:

Do you buy AND sell equipment? ☐ Yes ☐ NoDo you manufacture packaged equipment? ☐ Yes ☐ No**Available Codes:**

01 ---Batteries/Battery Chargers	09 ---Generator Laminations	19 ---Silencers/Exhaust Systems/Noise Abatement
02 ---Control/Annunciator Systems	10 ---Generator Sets	20 ---Solenoids
29 ---Education	11 ---Generators/Alternators	21 ---Switchgear and Transfer Switches (Automatic or Manual), Bypass Isolation Switches, and/or Switchgear Panels
30 ---Emission Control Equipment	12 ---Governors	22 ---Trailers, Generator Set
04 ---Enclosures, Generator Set	13 ---Heat Recovery Systems	23 ---Transformers
05 ---Engines, Diesel or Gas	14 ---Instruments and controls, including meters, gauges, relays, contactors, or switches	24 ---Uninterruptible Power Supplies
06 ---Engines, Gas Turbine	15 ---Load Banks	25 ---Vibration Isolators
07 ---Engine Starters/Starting Aids	16 ---Motor Generator Sets	26 ---Voltage Regulators
08 ---Filters, Lube Oil, Fuel or Air	17 ---Radiator/Heat Exchangers	27 ---Wiring Devices or Receptacles
28 ---Fuel Cells	18 ---Relays, Protective or Synchronizing	
03 ---Fuel Tanks and Fuel Storage Systems		

Enter codes here:**Products sold:** _____**Products rented:** _____**Products serviced:** _____**6. Sponsor(s):** A "Sponsor" is an EGSA Member who interested you in filling out this application. It is not mandatory that you have a sponsor for the Board to act favorably on this application; however, if a Member recommended that you consider membership, we request that individual's name and company name for our records.

Sponsor Name _____ Company Name _____

7. Official Representative's Authorization

Signature _____ Date _____

2012 EGSA Board Members

To promote continuity, EGSA has policies in place to provide ample leadership opportunities within the organization. Every year, three Directors “roll off” of the roster and three new ones are elected. Similarly, with regard to the EGSA Officers, the Immediate Past President leaves the Board; the President becomes the Immediate Past President and so on to fulfill the officer positions which are: President, President-Elect, Vice President, Secretary-Treasurer and Immediate Past President.

We thought viewing the list of “formal” accomplishments made to-date by our 2012 Board of Directors it might provide interesting reading for our subscribers. While this list is not meant to be comprehensive of all achievements, it is a great representation of how engaged our Board is. Hats off to our 2012 EGSA Board of Directors! ■


Michael Pope – 2012 President

Süd-Chemie, Inc., Needham, MA

Executive Board: 2008-current
 Director: 2005-2007
 Committee Chair: Education 2003-2006
 Green 2009-2010
 Committee Member: Technician Certification 2006-2009
 Reference Book Author: 4th & 5th Editions
 Timmler Award: 2006
 Carpenter Award: 2009
 Wright Award: 2003
 School Instructor: 2007-current


Debra Laurents – 2012 President-Elect

Cummins Power Generation, Fridley, MN

Executive Board: 2010-current
 Director: 2006-2008
 Committee Chair: Strategic Long Range Plan Chair
 Committee Officer: Technician Certification 2006-2007
 Membership 2008-current
 Committee Member: Technician Certification 2004-2005


Vaughn Beasley – 2012 Vice President

Ring Power Corporation, St. Augustine, FL

Executive Board: 2011-current
 Director: 2008-2010
 Committee Chair: Distributor/Dealer 2009-2011
 Committee Officer: Distributor/Dealer Council
 2006-2008
 Committee Member: Technician Certification 2008-current


Ed Murphy – 2012 Secretary-Treasurer

Power Search, Inc., Hampstead, NH

Executive Board: Current
 Director: 2003-2005
 Committee Chair: Membership 2003
 Communications & Convention
 2011-current
 Committee Officer: Communications &
 Convention 2007-2010
 Timmler Award: 2003


John Kelly, Jr. – Immediate Past President

Kelly Generator & Equipment, Inc., Owings, MD

Executive Board: 2008-current
 Director: 2005-2007
 Committee Chair: Distributor/Dealer Council
 1997-2002
 Committee Member: Technician Certification 2004-2009


Brian Berg – Director

Bergari Solutions, LLC, Rosemount, MN

Director: 2011-2013
 Committee Chair: Market Trends 2009-2011
 Committee Officer: Market Trends 2007-2008


Steve Evans – Director

DEIF, Inc., Fort Collins, CO

Committee Chair: Green 2011-current
 Committee Officer: Green 2009-2010
 Reference Book Author: 5th Edition
 School Instructor: 2010-current


Brad Fennell – Director

Chillicothe Metal Co., Inc., Chillicothe, IL

Board: 2010-2012
 Committee Chair: Trade Show 2010


Robert Hafich – Director

Emergency Systems Service Co., Quakertown, PA

Director: 2001-2003, 2011-2013
 Committee Chair: Nominating 2004
 Membership 2008-2011
 Technician Certification 2009-2011
 Committee Officer: Membership 2004-2007
 Technician Certification 2004-2008
 Carpenter Award: 2010


Todd Lathrop – Director

Eaton Corporation, Moon Township, PA

Committee Chair: Codes & Standard Surveillance
 2011-current
 Committee Officer: Codes & Standard Surveillance
 2007-2010
 Reference Book Author: 5th Edition
 School Instructor: 2005-current


Larry Perez – Director

Basler Electric Co., Highland, IL

Director: 2011-2013
 Reference Book Author: 3rd, 4th & 5th Editions
 School Instructor: 1995-1998


Ronald Schroeder – Director

ASCO Power Technologies, Florham Park, NJ

Director: 2010-2012
 Reference Book Author: 5th Edition
 School Instructor: 1994-current


Mark Steele – Director

Technology Research Corporation, Clearwater, FL

Director: 2010-2012
 Committee Chair: Government Relations
 Co-Chair 2009-current
 Committee Officer: Government Relations 2005-2008


Kyle Tingle – Director

John Deere Power Systems, Waterloo, IA

Committee Chair: Market Trends 2011-current
 Committee Officer: Market Trends 2009-2011



THE HAFICH CHALLENGE EGSA Membership Drive

In October, EGSA announced that the annual membership drive had changed... and more importantly, that the stakes had been raised! Through the month of March, we are waiving our initiation fee for anyone who joins EGSA! (Full and Regular Associate Members save \$100, Manufacturers save \$200.)

It's has proven to be the most competitive membership drive that EGSA has ever organized. Here is a recap of the details: the EGSA Member* who recruits the most new members between now and 5:00 pm EST on March 5, 2012 will walk away with close to \$1000 in prizes. All you have to do is make sure that you are listed as the sponsor on any new membership applications sent to EGSA.

During the week of February 27th, EGSA staff will announce (via email) the list of members who are contenders for the Prize. This will provide each member with the standings in hopes to spar on the competition. In the event of a tie, a random drawing will determine the winner among the top contenders. The drawing will be held on Tuesday at the Spring Convention in Austin, TX.

This is BIG - EGSA is serious about membership and we stand ready for you to weigh in!

THE HAFICH CHALLENGE PRIZE PACKAGE

- **One Complimentary Registration for the 2012 Fall Conference**
(Estimated value \$525)
 - **One Free Social Event at the Fall Conference**
(Estimated value - up to \$200)
 - **\$250.00 Hotel credit**
- And of course...**
- **\$100 in EGSA Bucks for each new company you recruit!**

The prize package has an estimated value of almost \$1000...maybe more!

Prize package to be awarded at the 2012 EGSA Spring Convention March, 25-27, 2012, Austin, TX. ■

**Excluding complimentary memberships*



READY?

RICE NESHAP IS COMING

RICE-NESHAP – An upcoming EPA regulation for stationary engines requires installation of Exhaust Control Technology. Are you **READY?**

To find out, visit:
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or scan this tag



Or call:
1-855-4-NESHAP

Relax...

Generator Monitoring Just Got Easier



+



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Parameter	Unit	Value	Alarm	History
Engine Speed	RPM	1500	OK	1500, 1500, 1500
Engine Load	%	75	OK	75, 75, 75
Engine Temp	°C	85	OK	85, 85, 85
Engine Oil Pressure	PSI	40	OK	40, 40, 40
Engine Fuel Level	%	80	OK	80, 80, 80
Engine Hours	Hours	1000	OK	1000, 1000, 1000
Engine Vibration	mm/s	2.5	OK	2.5, 2.5, 2.5
Engine Exhaust Temp	°C	150	OK	150, 150, 150
Engine Coolant Temp	°C	90	OK	90, 90, 90
Engine Battery Voltage	V	12.5	OK	12.5, 12.5, 12.5
Engine Battery Current	A	10	OK	10, 10, 10
Engine Oil Level	mm	100	OK	100, 100, 100
Engine Water Level	mm	100	OK	100, 100, 100
Engine Air Filter	mm	100	OK	100, 100, 100
Engine Fuel Filter	mm	100	OK	100, 100, 100
Engine Oil Change	Hours	1000	OK	1000, 1000, 1000
Engine Fuel Change	Hours	1000	OK	1000, 1000, 1000
Engine Air Change	Hours	1000	OK	1000, 1000, 1000
Engine Water Change	Hours	1000	OK	1000, 1000, 1000
Engine Oil Filter	Hours	1000	OK	1000, 1000, 1000
Engine Fuel Filter	Hours	1000	OK	1000, 1000, 1000
Engine Air Filter	Hours	1000	OK	1000, 1000, 1000
Engine Water Filter	Hours	1000	OK	1000, 1000, 1000

OMNIMETRIX
GLOBAL MONITORING + CONTROL

Monitoring your generator doesn't have to be complicated. With OmniMetrix remote generator monitors, you can stay informed anywhere, anytime. Our global plug-and-play monitoring solutions are compatible with all major genset brands and are available with 2G and 3G Cellular, Satellite, and LAN options.

So relax—with OmniMetrix, your monitoring problems are solved.

Generator Field Service Technician

Pacific Power Generation is currently seeking experienced Gen Techs for our Kent & Ridgefield, WA locations. PPG has been a premier full service generator distributor in the NW for over 50 yrs, including Washington, Oregon, Alaska, and Hawaii. Please see our websites www.pacificdda.com and www.pacificpowergen.com

We offer competitive wages and Medical/Dental/Vision/401K. For consideration, please forward a resume highlighting skill-sets, experience, education and achievement. E-mail to Jadsero@pacificpowergen.com or fax 253-395-2408.

PPG is an Equal Opportunity Employer
EGSA Certified Technicians Preferred.

Generator Service Sales

Full-time experienced generator service salesperson in Phoenix, AZ. Territory includes southern Nevada, Arizona and New Mexico. A successful candidate will need a working knowledge of power generation equipment and strongly driven to seek out new customers. We offer competitive base and commission rates, along with a full complement of benefits. Please fax resume to (602) 233-2620.

Emergency Generator Sales

We are growing! Genset Services, Inc., the top tier industrial distributor for Generac generators in South Florida, has an opening for an outside salesperson. Candidates should have a minimum of 3 yrs sales experience in emergency power equipment or in a related field. We offer a competitive compensation package that includes a base salary, plus commission, car allowance, health insurance, vacation and investment plan. Please forward your resume with cover letter and salary requirements to matt@gensetservices.com.

Experienced Generator Technician

Weld Power Service Co. of Auburn, MA has an immediate opening for an experienced Generator Technician. We are looking for a highly motivated, self-sufficient technician, able to assist our expansion efforts. Candidates must have a minimum three years of experience in servicing industrial generator sets. Must be able to service, repair, troubleshoot both gaseous and diesel engines, as well as alternator ends, controls and automatic transfer switches. Weld Power Services Company offers industry competitive wages, paid vacation, holidays, 401K contributions, medical, dental and life insurance coverage. Starting pay based on experience (\$16-\$28/hour). Please email your resume and cover letter to weldpowerjobs@gmail.com.

EGSA Certified Technicians Preferred.

Industrial Switchgear Product Specialists

TAW® is looking for Industrial Switchgear Product Specialists for our Power & Distribution & Switchgear Div. at our custom equipment facility in Riverview, FL. Candidate will increase sales of switchgear & power equipment centers for low & medium voltage product lines with new & existing accounts and target customers for utilities; OEM's & municipalities to drive volume. Prior experience either selling, or application engineering of, industrial switchgear systems. Prior experience working for a manufacturer, or re-seller of industrial switchgear – medium or low voltage in either an engineering; applications; or sales role. TAW® offers a competitive salary and commission, as well as benefits. Candidates can be based, & will cover the following markets: Houston, Atlanta, Charlotte & Birmingham. Candidates should e-mail resumes to ellen.donegan@tawinc.com. or fax resumes to (813) 217-8076; AA/EOE. DFWP. www.tawinc.com

EGSA Job Bank Guidelines

EGSA will advertise (free of charge) EGSA Member company job openings in the Job Bank. Free use of the Job Bank is strictly limited to companies advertising for positions available within their own firms. Companies who are not members of EGSA and third-party employment service firms who service our industry may utilize the Job Bank for a \$300 fee. Blind box ads using the EGSA Job Bank address are available upon request; company logos may be included for an additional fee. EGSA reserves the right to refuse any advertisement it deems inappropriate to the publication. Please send your classified ad (limited to approximately 50 words) to: EGSA Job Bank, 1650 S. Dixie Hwy, Suite 400, Boca Raton, FL 33432. Or, send it via e-mail it to: j.kellough@EGSA.org

Penn Power Systems

Penn Power Systems, an industry leader with power systems sales of MTU Onsite Energy products is seeking qualified sales people for central and eastern PA. Individuals need to possess a high drive to succeed and be comfortable discussing projects with engineers, contractors and end users. Penn offers a very aggressive salary and compensation package, along with benefits and the necessary sales tools to succeed. Please send resumes to jtiffan@pennpowersystems.com

Generator Technicians

Due to our continued growth, Central Power Systems & Services, Inc. has immediate openings for generator technicians at several of our Missouri, Kansas and Oklahoma facilities, with immediate needs in Kansas City, MO and Wichita, KS. Ideal applicants will have working experience with diesel generator sets, gaseous generator sets, and automatic transfer switches. EGSA Certified preferred, but not required. We offer a strong base wage and a full benefit package (including FREE MEDICAL & LIFE insurance) and PAID RELOCATION, depending on experience and skill set. Fax a cover letter, salary requirements and your resume to 816-781-4518 or e-mail it to jobs@cpower.com. EOE

Rental Sales

Kelly Generator & Equipment, Inc. is seeking an experienced RENTAL SALES person to join our Team. We are a full-service distributor of emergency standby and prime power located in the mid-Atlantic region: Delaware, Maryland, Washington DC, Northern Virginia and West Virginia.

- Develop strong relationships with electrical and general contractors, home builders, event companies, industrial and commercial end users and rental houses.
- Focus will be on the rental (and sales) of mobile generator sets, as well as renting load banks.
- Sell service contracts

We offer a solid base with commission, medical, dental, vision, 401(k), profit sharing and more. Fax resumes to 410-257-5227 or e-mail dkelly@kge.com

Team-Focused Technicians Only

Would you enjoy joining an exciting team of professional technicians? This may be the opportunity you have been looking for! DynaTech Power is a service-focused generator company with a strong team culture committed to delivering world-class service to our customers in PA, NJ, MD, and DE. Apply at <http://dynatechjobs.prevueaps.com/jobs>. EGSA graduates and interns welcome! 800.779.8809 x213. Learn more at www.dynagen.com
EGSA Certified Technicians Preferred.

Generator Technicians

Kelly Generator & Equipment, Inc., the mid-Atlantic leader in standby electrical generators is seeking experienced generator technicians. We are a full-service distributor of emergency standby and prime power located in the mid-Atlantic region that covers Delaware, Maryland, Northern Virginia, West Virginia and Washington, DC.

SALES, SERVICE, PARTS, RENTALS & TRAINING

- We offer factory training on the lines we represent, as well as "in-house" training
- Medical, Dental, Vision, 401(k), profit sharing, short and long term disability, paid holidays, annual leave, overtime and paid "On Call"

Must have a High School Diploma (Vo-tech or GED), 3 – 5 years experience servicing industrial generator sets and associated equipment. Must be able to service, repair and troubleshoot the engine, as well as the alternator end and controls of the equipment. E-mail resumes to dkelly@kge.com
EGSA Certified Technicians Preferred.

Generator Service Technicians

We are growing! Genset Services, Inc. is seeking qualified generator technicians for our Central and South Florida branches. Working knowledge of Diesel and gaseous engine-driven generator sets is required including service/maintenance, troubleshooting/repair of AC and DC electrical and control systems, as well as strong computer skills. Ideal candidate will have neat appearance and clean driving record. We offer a competitive compensation package, including a company vehicle, health insurance, vacation and an investment plan. Please forward your resume with cover letter and salary requirements to keith@gensetservices.com
EGSA Certified Technicians Preferred.

Territory Sales Rep

Kelly Generator & Equipment, Inc., is a rapid response, full service distributor of emergency standby and prime power located in the mid-Atlantic, one of the largest demand markets for power generation in the country. We offer SALES, SERVICE, PARTS, RENTALS, TRAINING. We have an immediate opening for a Territory Sales Representative. Great opportunity and territory for the right person!

Identify, pursue, grow and close new and existing client base of:

- Electrical, Design and Consulting Engineers
- Electrical Contractors
- General Contractors
- Commercial/Industrial End Users (i.e., Mission Critical Data Centers, Healthcare Facilities, Manufacturing)

Medical, Dental, Vision, 401(k) and more. Competitive base with commission.

Email dkelly@kge.com www.kge.com

Experienced Power Generation Technicians Wanted

Penn Power Systems, leaders in the power generation business, is actively seeking experienced field service technicians for open positions in our upstate New York and Pennsylvania locations. Candidates should be familiar with natural gas and diesel prime movers with industry experience and knowledge of systems and controls. Penn Power Systems, and its divisions, offer industry competitive salaries, medical, 401(k), and vacation benefits. All interested parties should send resumes and work history to jobs@pennpowersystems.com or call 1-877-736-4473. We Proudly Employ EGSA Certified Generator Technicians. EOE M/F/D/V

Senior Generator Technician

Leete Generators (California) is looking for a SENIOR GENERATOR TECHNICIAN with in-depth experience (10+ years) and knowledge of all generator components; installation, start-ups, repair, load bank testing, etc. Please do not apply if you do not have EXTENSIVE experience with back-up, industrial generators. E-mail: l.ramsay@leeteGenerators.com.

Generator Service Technicians

CJ's Power Systems in Florida, a distributor for MTU Onsite Energy, is currently seeking qualified technicians throughout the State. Job includes: performing planned maintenance, diagnostics, repairs, and startups of generators. Knowledgeable, computer skills, clean driving record a must. Excellent pay, medical, and other benefits. E-mail resumes: jobs@cjspower.com; fax to 352-732-0606 EGSA Certified Technicians Preferred.

Generator Set Sales/Service

Experienced sales/service engineer needed by southern California company to sell engine generator sets. Please respond to J.Kellough@EGSA.org (Reference PLND06JB-1).

Industrial Panel Division Manager

FW Murphy, Tulsa, OK, is seeking an Industrial Panel Division Manager who will be responsible for management and growth of panel division, serving industrial, power-gen, and off-highway markets. Require bachelor's degree in engineering or business, as well as business or technical aptitude with 3-5 years market experience. Strong knowledge and experience in Industrial Stationary industry, focused on instrumentation, control and/or display technology. Send resume to kclark@fwmurphy.com.

Generator Technician

Full-time experienced generator field technician needed for Central Florida/Lakeland area. Applicant must have diesel engine experience and transfer switch knowledge, preferably EGSA certified. Job includes performing preventive maintenance, repairs, and startups of generators. Clean driving record a must and applicant must pass drug screening. Competitive wages and benefits. E-mail resumes to skapparos@suregen.com EGSA Certified Technicians Preferred.

Generator Sales Professional

Central Power Systems & Services, Inc. – seeking generator salesperson based out of Kansas City. This position will work from our new stand-alone facility dedicated to the generator business and will be focused on promoting MTU OnSite Energy products. We offer a strong base wage, incentive program and a full benefit package (including company car, gas allowance, expense card, FREE MEDICAL insurance, FREE LIFE insurance, paid vacation, profit sharing and 401(k), etc.) and PAID RELOCATION depending on experience and skill set. Fax a cover letter, salary requirements and your resume to 816-781-4518 or e-mail it to jobs@cpower.com. EOE

Field Service Engineer

Russelectric Inc., has immediate openings for the Northern California Region. Seeking qualified engineers with backgrounds in emergency power systems (transfer switches, switchgear, plc's, scada). We offer a full benefits package, including company van, medical, dental, retirement plan. Please send your resume w/cover letter and salary requirements to jdoran@russelectric.com.

Generator Field Technicians

TAW® is searching for experienced Generator Field Technicians in Alabama, Louisiana and Mississippi. Duties include: inspections, repairs, services and start-up of generators & ATS. Troubleshoot generators & automatic transfer switches. Diesel engine experience desired. E-mail resume to ellen.donegan@tawinc.com. Fax (813) 217-8076.AA/EOE. DFWP. www.tawinc.com EGSA Certified Technicians Preferred.

Generator Field Technician

PM Technologies, LLC has several immediate openings for generator technicians. We are located and operate in Michigan, Ohio and northern Indiana. High School Diploma or equivalent a must. Military experience a plus. Must be able to troubleshoot and repair the engine (diesel and gaseous) as well as the generator end. Customer interaction will be required on a daily basis. We need highly motivated, self-sufficient people to assist in growing our expansion efforts at new branch locations. Benefits include company vehicle, 401K, Health, Dental and Vision coverages, as well as paid bonuses for new account procurement. Fax resumes to 248.374.6408 or e-mail to dpopp@pmtech.org EGSA Certified Technicians Preferred.

Regional Field Service Manager - Western States

West Region - Mainly: WA, OR, CA, NV, AZ, CO, UT, OK, NM

Magnum Power Products, LLC

Magnum Power Products, leader in the industry has an immediate opening for a Regional Field Service Manager. Field Service Manager, working with the Regional Sales Manager(s), will ensure customer satisfaction on all levels of business with Magnum Power Products in their respective territory. For more information on Magnum and the opportunities visit website at www.m-p-llc.com and/or send resume to hr@m-p-llc.com.

Sales Admin Assistant

Energy Systems N. California has opening for Sales Admin Assistant responsible for assisting sales team in rfp mining, quote preparation, bid follow up, project coordination and customer support. Must have working knowledge of generators, 2 years sales experience, computer proficiency and technical aptitude. We are an established 4th generation company offering family values and long term prospects. Email resumes to bali@energysystem.net.

Sales Representatives

TAW® Power Systems, the Kohler Generator Distributor for the Gulf Coast, is adding to our sales force in FL, AL, MS & LA for industrial & service sales. E-mail resumes to ellen.donegan@tawinc.com or fax 813-217-8076. DFWP AA/EOE. www.tawinc.com.

Regional Sales Manager - NW NW Region - Mainly: AK, WA, OR, ID, and Parts of BC & MT

Magnum Power Products, LLC

Magnum Power Products, leader in the industry has an immediate opening for a Regional Sales Manager. Sales Managers are responsible for planning, coordinating and managing all sales related activities in their assigned region. They will establish effective business relationships to increase sales revenues and customer accounts, build market share, sell the full Magnum product line and ensure total customer satisfaction. For more information on Magnum and the opportunities visit website at www.m-p-llc.com and/or send resume to hr@m-p-llc.com.



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No stocking required, same day shipping on 90% of orders, technical support and the best pricing

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For Eastern US call
1-800-790-1672 x-6931

www.NatPow.com

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FW Murphy, Tulsa, Oklahoma Industrial Stationary Sales Manager

Key Responsibilities: Selling electronic engine management/instrumentation systems to Engine OEMs and their dealers, managing large OEM customers, support assistance of customers and distributors, assist new product specification and market research, Manage North and South American sales team. BS required. Sales experience in industrial engine business. 50% travel required. kclark@fwmurphy.com.

Regional Service Sales Consultant

Kentech is a world class leader in Power Generation and we are seeking an experienced Texas regional service sales consultant. This is a great opportunity for an aggressive person, looking for upward mobility in a growing company. Location: San Antonio or Houston TX. Interested candidates should send their resume @ jobs@kentechpower.com or by fax to 210-946-2473.

Field Service Technician

Perform preventative maintenance, start-ups and repairs on generators; including automatic transfer switches, diesel, and gaseous engines. Promote safe and efficient operation of duties. Up to 35% travel required.

- Diagnoses and repairs generator set systems and ancillary components in a field environment
 - Performs complex power generation system commissioning and startups.
 - Field engineers and/or field modifies equipment
- Applicants apply at www.mtuonsiteenergy.com/mtuonline/

Generator Sales

Energy Systems Generac Distributor for N. California has immediate opening for seasoned sales professionals for our SFO Bay area and Sacramento territories. Must be knowledgeable in power generation, self starter with business development skills. We are an established 4th generation company offering family values and long term prospects. Email resumes to bali@energysystem.net.

Experienced Mechanical Application Engineer

Enercon Engineering, an established Midwestern electrical and mechanical manufacturer and systems integrator, requires an **experienced Mechanical Application Engineer** in East Peoria, IL with genset packaging expertise. M.E. or equivalent industry experience with diesel and gas engine gensets required. We provide a competitive relocation package, 401K, Health and Dental plan. Salary commensurate with experience and education. Send cover letter, resume and salary requirements to hr@enercon-eng.com. Enercon is an equal opportunity employer.

Generator Service Technician

Antilles Power is seeking a highly motivated, self-sufficient candidate for our Caribbean, Virgin Islands locations. Duties include: Preventative Maintenance, Troubleshooting, Commissioning, Diagnostics, repairs of Generators and Automatic Transfer Switches. Diesel engine and marine experience required. Drug screening and clean driving records are prerequisites. Computer knowledge and EGSA Certified Technician Preferred. E-mail resume with references and salary requirements to m.torres@antillespower.com

Generator Service Technicians Prime Power Services, Inc.

Growing company is seeking qualified candidates in the Raleigh, Charlotte, Columbia area- with 3-5 years of experience in the power generation field, skilled in both mechanical and electrical applications having knowledge in troubleshooting, maintenance/repair for gensets ranging from 5-2000 KW w/associated fuel systems, switchgear, transfers and controls. Must pass a criminal background/drug screen, experience w/UPS systems, and other EPSS systems.

Please forward your resume with cover letter and salary requirements to ccernut@primepower.com
EGSA Certified Technicians Preferred.

Generator Tech, Class A

Seeking a "Class A" generator technician in the Birmingham, AL area. 15 years of experience in diesel power generation industry required. Responsible for start up, commissioning, troubleshooting and maintenance on a variety of diesel and gas power generation sets and their control systems, including ATS and switchgear. Must be able to diagnose and repair power generators in-house and in the field, using technical expertise and diagnostic equipment. Must be willing to work in a team environment. Some overnight travel with occasional extended travel required. To apply email resume to awallace@maegen.com. EGSA Certified Technicians Preferred.

Project Engineer

Energy Systems N. California has opening for a Project engineer to provide support to our sales team and engineering customers. PE to carry out sizing and technical specification reviews and produce final quotes of generators. Must have business skills. Manage entire process from submittals to delivery and startup. We are an established 4th generation company offering family values and long term prospects. Email resumes to bali@energysystem.net.

Equipment Sales

Kentech Power is looking for a full-time power generation equipment salesperson. Potential candidates should possess previous sales experience, preferably in the power generation equipment field. They must be highly motivated and customer focused. They must be willing to work in the San Antonio / Austin area. Interested candidates should send their resume @ jobs@kentechpower.com or by fax to 210-946-2473.

Generator Field Technician-Experienced

ACF Standby Systems seeks full-time experienced generator field technicians for openings in the Orlando/Miami, FL areas. Requires advanced knowledge of standby generator systems. Minimum 5 years experience. Working knowledge of 12 & 24 VDC controls. Company offers a full comprehensive benefits package. Competitive wage, company vehicle, laptop and cell phone for qualified candidates. Send resumes to careers@acfpower.com or fax to HR at 813-621-6980. EGSA Certified Technicians Preferred.

INDUSTRY NEWS

Kohler Power Systems Names New Vice President Of Engineering

Richard Locke was appointed Kohler Co.'s Vice President of Engineering for the company's Kohler Power Systems division, which manufactures residential, marine and commercial power generating systems.



Locke is responsible for leading global product innovation in the design, engineering and overall development efforts of Kohler Power Systems. He provides strategy and framework to achieve world-class product development capability, including maintaining design engineering processes, identifying and adapting new technologies, and improving engineering support services.

He began his Kohler Power Systems career as project engineer in 1987, serving most recently as the director of product engineering.

Locke earned his bachelor's degree in mechanical engineering from the University of Michigan and his master's in engineering from the University of Wisconsin – Madison.

Visit www.kohler.com for more information. ■

Industrial Power Systems Inc. (IPS) Acquired by Industrial Electric Mfg. (IEM)

IPS, integrated solution provider of quality electrical controls and switchgear, was recently acquired by Industrial Electric Mfg. (IEM). The acquisition allows IPS the opportunity to expand their capabilities to become a market leader in custom design and power control, marine, and distribution equipment industries.

Headquartered in Fremont, CA, IEM is the largest independent full-line manufacturer of electrical distribution and power quality equipment in the U.S. For over half a century, IEM has delivered cus-

tom-specific solutions to meet the ever changing power requirements of growth industries in North America.

"This acquisition will allow IPS to continue to serve our customer base and expand our capabilities," said Bill Young, Founder and President of IPS. "After 30 years of commitment to providing solutions for our customers, we are looking forward to joining the IEM team."

IEM has leased an 86,000-square-foot building in Jacksonville to ensure a smooth transition for IPS that will deliver immediate value for employees, customers, and partners.

"IPS is a perfect fit for IEM," said Ed Rossi, President and CEO of IEM. "It allows us to expand our market reach while maintaining our core business focused on providing customer-specific solutions with the highest quality power distribution equipment and controls on the market."

Visit www.ipsswitchgear.com for more information. ■

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Emerson Announces Two Key Sales Additions

Emerson Industrial Automation, a business of Emerson (NYSE: EMR), today announced the promotion of Brandon Locklear to Regional Sales Manager for Latin America and added Craig Wilkens as Sales Manager for North America due to increased demand for Leroy Somer's Industrial Alternator product line in North and South American regions.

Formerly Sales Manager for Leroy Somer's key accounts in North America, Locklear was named Regional Sales Manager for Latin America, based in Sunrise, FL, to support Emerson's market growth initiatives in the region. He is a 1999 graduate of the University of Tennessee-Knoxville and is fluent in Portuguese and Spanish. Prior to his new position, Locklear was involved in technical international sales for five years, working with Latin America's electrical power



Brandon Locklear

transmission & distribution industry.

Wilkens will replace Locklear as Sales Manager for key accounts in North America. A 1988 graduate of Lakeland College in Sheboygan, WI, he brings 25 years of power generation experience, including equipment sales and project management, to the position.

Most recently, Wilkins worked as Director of Sales for Hipower, the North American division of Himoina Power Systems. At Himoina, he was responsible for sourcing distributorships, quotation management, pricing, inventory and product development. His efforts resulted in a sales volume increase of more than 400 percent in just two years. Prior to Hipower, Wilkins' power systems sales management experience included Ingersoll-Rand, Cummins Mid-South and Kohler Power Systems.

Visit www.Emerson.com for more information. ■



Craig Wilkens

National Power Corporation hires John R. Lowe as VP General Manager

National Power Corporation (NPC), a Southeast distributor of power solution products, is delighted to announce that John R. Lowe has joined the company in the position of VP General Manager. In this position he will be responsible for the overall day to day operations.

John has a BS in Physics and a BA in Political Science from The Citadel. He also has attended an executive education series at Harvard Business School and UNC's Kenan Flagler. After college John held various positions in the ocean freight business before joining Westinghouse Electric in 1992 where he managed the NC Triad region as the Greensboro, NC branch manager of WESCO. In 1997 John joined Newton Instrument Company as the Premises Solutions Division Manager responsible for sales and operations. John later became the executive VP of Sales and Operations for Newton. In 2003 John was appointed the Director of Customer Service and Contract Administration for Powerware and during



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the Eaton purchase became the Southeast Sales Manager for 3 phase UPS products. In 2007 John became the Mid-Atlantic Sales Manager with responsibility for all Eaton Power Quality products where he led his team to four consecutive years of greater than 20% annual growth.

"There are tremendous opportunities ahead for National Power Corporation with the rapidly growing power product and service needs within the US," John said. "I am very excited to join the excellent team at National Power and look forward to working with them to build on our national reputation as the leading resource for Power Quality products." John and his family reside in Raleigh, NC and will be based at National Power's headquarters.

Visit www.natpow.com for more information. ■

Caterpillar And Energyst Sign Agreement On International Power Projects

Extensive collaboration planned to better serve IPP market

Caterpillar Inc. and Energyst Cat Rental Power announced that the companies have signed a five-year agreement to globally develop temporary power solutions. By working with Caterpillar, Energyst will further strengthen its position in the international power projects (IPP) market by offering readily available, competitively priced power solutions from Caterpillar supported by partnerships within the extensive Cat® dealer network.

"Energyst has demonstrated expertise in deploying large projects worldwide and we see great opportunities in the IPP market," said Gary Smith, Chief Execu-

tive Officer of Energyst. "By putting this 'dream team' together with Caterpillar, we are uniquely positioned to leverage the key Cat distribution network in our territories and provide solutions of the highest value to our customers."

"The experience we gain with Energyst will allow Caterpillar to continue our growth in the international power projects business," said Bill Rohner, Caterpillar Vice President, with responsibility for electric power. "Through this agreement, we are able to provide the engineering, product expertise and experience to meet the growing temporary power solutions needs of our current and future customers."

Energyst and the IPP Market

Energyst provides worldwide coverage through a vast network of depots that collaborate with Caterpillar dealers for local know-how and expertise. Working together, this combination can exceed customer expectations with the most innovative and responsive power and temperature control rental solutions and service. For example, Energyst successfully deployed 60 MW for a large energy company in Argentina earlier this year, and an additional 50 MW is scheduled for placement over the next six weeks.

Caterpillar is a leader in the power generation marketplace with power systems engineered to deliver unmatched durability, reliability and value. The company offers worldwide product support, with parts and service available globally through the Cat authorized service and dealer network. In addition, dealer service technicians are trained to service every aspect of Cat equipment.

Visit www.catelectricpowerinfo.com for more information. ■

Pramac America Moving to New North America HQ

Pramac America, a global manufacturer and distributor of portable and stationary power generating equipment, announces a consolidation of North American operations in Marietta, GA. The new facility will serve as Headquarters and Southeast distribution center. The move will be complete in November 2011 and the new address is 1300 Gresham Road, Marietta, GA 30062. The new location will house management, sales, marketing, logistics and accounting with parts, product support and service remaining at the Pramac factory location in Kearney, NE. A power generation training facility has also been included in support of the new programs scheduled to begin in the Spring of 2012.

Visit www.pramac.com for more information. ■

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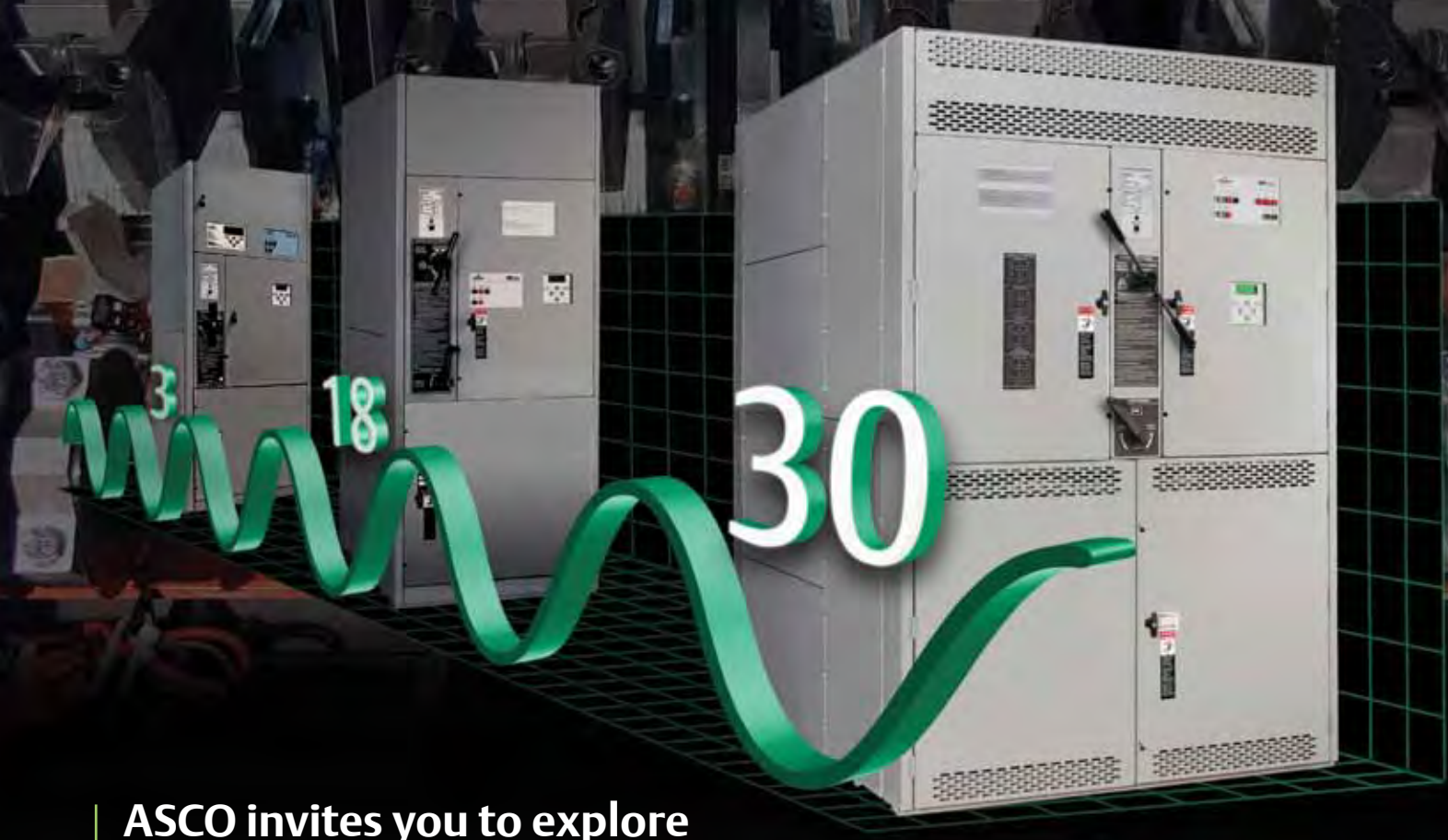


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